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 NEWS  1           Web Page for STN Seminar Schedule - N. America
 NEWS  2  JAN 02   STN pricing information for 2008 now available
 NEWS  3  JAN 16   CAS patent coverage enhanced to include exemplified
                   prophetic substances
 NEWS  4  JAN 28   USPATFULL, USPAT2, and USPATOLD enhanced with new
                   custom IPC display formats
 NEWS  5  JAN 28   MARPAT searching enhanced
 NEWS  6  JAN 28   USGENE now provides USPTO sequence data within 3 days
                   of publication
 NEWS  7  JAN 28   TOXCENTER enhanced with reloaded MEDLINE segment
 NEWS  8  JAN 28   MEDLINE and LMEDLINE reloaded with enhancements
 NEWS  9  FEB 08   STN Express, Version 8.3, now available
 NEWS 10  FEB 20   PCI now available as a replacement to DPCI
 NEWS 11  FEB 25   IFIREF reloaded with enhancements
 NEWS 12  FEB 25   IMSPRODUCT reloaded with enhancements
 NEWS 13  FEB 29   WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                   U.S. National Patent Classification
 NEWS 14  MAR 31   IFICDB, IFIPAT, and IFIUDB enhanced with new custom
                   IPC display formats
 NEWS 15  MAR 31   CAS REGISTRY enhanced with additional experimental
                   spectra
 NEWS 16  MAR 31   CA/CAplus and CASREACT patent number format for U.S.
                   applications updated
 NEWS 17  MAR 31   LPCI now available as a replacement to LDPCI
 NEWS 18  MAR 31   EMBASE, EMBAL, and LEMBASE reloaded with enhancements
 NEWS 19  APR 04   STN AnaVist, Version 1, to be discontinued
 NEWS 20  APR 15   WPIDS, WPINDEX, and WPIX enhanced with new
                   predefined hit display formats
 NEWS 21  APR 28   EMBASE Controlled Term thesaurus enhanced
 NEWS 22  APR 28   IMSRESEARCH reloaded with enhancements
 NEWS 23  MAY 30   INPAFAMDB now available on STN for patent family
                   searching
 NEWS 24  MAY 30   DGENE, PCTGEN, and USGENE enhanced with new homology
                   sequence search option
 NEWS 25  JUN 06   EPFULL enhanced with 260,000 English abstracts
 NEWS 26  JUN 06   KOREAPAT updated with 410,000 documents
 NEWS 27  JUN 13   USPATFULL and USPAT2 updated with 11-character
                   patent numbers for U.S. applications
 NEWS 28  JUN 19   CAS REGISTRY includes selected substances from
                   web-based collections
 NEWS 29  JUN 25   CA/CAplus and USPAT databases updated with IPC
                   reclassification data
 NEWS 30  JUN 30   AEROSPACE enhanced with more than 1 million U.S.
                   patent records
 NEWS 31  JUN 30   EMBASE, EMBAL, and LEMBASE updated with additional
                   options to display authors and affiliated
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                organizations
NEWS 32   JUN 30   STN on the Web enhanced with new STN AnaVist
                   Assistant and BLAST plug-in
NEWS 33   JUN 30   STN AnaVist enhanced with database content from EPFULL

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
             AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS      STN Operating Hours Plus Help Desk Availability
NEWS LOGIN      Welcome Banner and News Items
NEWS IPC8       For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
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* * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 11:01:39 ON 15 JUL 2008

=> file registry
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY       SESSION
FULL ESTIMATED COST                                   0.21          0.21

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STRUCTURE FILE UPDATES:   14 JUL 2008  HIGHEST RN 1034013-75-6
DICTIONARY FILE UPDATES:  14 JUL 2008  HIGHEST RN 1034013-75-6

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

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Uploading C:\Program Files\Stnexp\Queries\10-564829 gen.str
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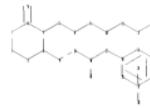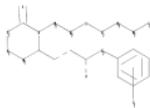
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chain nodes :
7   8   9   10   11   12   13   14   15   16   17   25   26   28
ring nodes :
1   2   3   4   5   6   18   19   20   21   22   23
chain bonds :
4-25   5-7   6-14   7-8   8-9   9-10   10-11   11-12   12-13   14-15   15-16   16-17   16-26
17-20
ring bonds :
1-2   1-6   2-3   3-4   4-5   5-6   18-19   18-23   19-20   20-21   21-22   22-23
exact/norm bonds :
1-2   1-6   2-3   3-4   4-5   4-25   5-6   12-13   14-15   16-26
exact bonds :
5-7   6-14   7-8   8-9   9-10   10-11   11-12   15-16   16-17   17-20
normalized bonds :
18-19   18-23   19-20   20-21   21-22   22-23


G1:C,S,P

G2:C,O,N

Match level :
1:Atom   2:Atom   3:Atom   4:Atom   5:Atom   6:Atom   7:CLASS   8:CLASS   9:CLASS   10:CLASS
  11:CLASS   12:CLASS   13:CLASS   14:CLASS   15:CLASS   16:CLASS   17:CLASS   18:Atom
19:Atom   20:Atom   21:Atom   22:Atom   23:Atom   25:CLASS   26:CLASS   28:CLASS   29:Atom



L1      STRUCTURE UPLOADED
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L1 HAS NO ANSWERS
L1              STR
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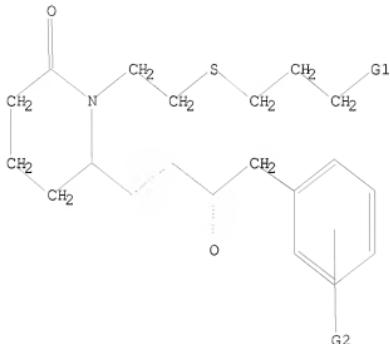


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G1 C,S,P
G2 C,O,N


Structure attributes must be viewed using STN Express query preparation.



=> s l1 sss full
FULL SEARCH INITIATED 11:03:07 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      342 TO ITERATE

100.0% PROCESSED      342 ITERATIONS                               1 ANSWERS
SEARCH TIME: 00.00.01

L2           1 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                              SINCE FILE      TOTAL
                                                     ENTRY       SESSION
FULL ESTIMATED COST                                 178.82       179.03

FILE 'CAPLUS' ENTERED AT 11:03:13 ON 15 JUL 2008
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FILE COVERS 1907 - 15 Jul 2008 VOL 149 ISS 3
FILE LAST UPDATED: 14 Jul 2008 (20080714/ED)

Caplus now includes complete International Patent Classification (IPC)
reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/legal/infopolicy.html

=> s l2
L3   2 L2

=> d l3 1-2 abs ibib hitstr

L3   ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
GI

                                I
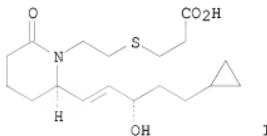
AB   2-Piperidones, e.g., I, were prepared bearing heptanoic acid or a thioether
      heptanoic acid at the 1-position as well as appropriately substituted at
      the 6-position to mimic the structure of prostaglandins. The stereochem.
      purity at the 6-position was determined to be ≥95% ee for an advanced
      synthetic intermediate. The 2-piperidones were identified as potent
      agonists at the EP4 prostanoid receptor. They displayed a high affinity
      (Ki 5-130 nM) at EP4 and subtype selectivity.
ACCESSION NUMBER: 2005:378879 CAPLUS
DOCUMENT NUMBER: 143:59790
TITLE: Lactams as prostanoid receptor ligands. Part 4:
                         2-Piperidones as selective EP4 receptor agonists
AUTHOR(S):   Elworthy, Todd R.; Brill, Emma R.; Caires, Christopher
                         C.; Kim, Woongki; Lach, Leang K.; Tracy, Jahari
                         Laurant; Chiou, San-San
CORPORATE SOURCE: Roche Palo Alto, Department of Medicinal Chemistry,
                         Palo Alto, CA, 94304-1397, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2005),
                         15(10), 2523-2526
                         CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S):   CASREACT 143:59790
IT   724705-74-2P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL
     (Biological study); PREP (Preparation)
        (stereoselective preparation and EP4 receptor binding affinity of
        piperidones starting from aminoadipic acid using resolution as the key
   step)

RN   724705-74-2 CAPLUS
CN   Butanoic acid, 4-[[2-[(2R)-2-[(1E,3S)-3-hydroxy-4-[3-
     (methoxymethyl)phenyl]-1-buten-1-yl]-6-oxo-1-piperidinyl]ethyl]thio]- (CA
     INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.
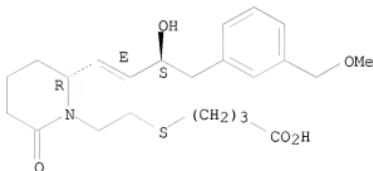
REFERENCE COUNT: 16   THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3   ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
GI
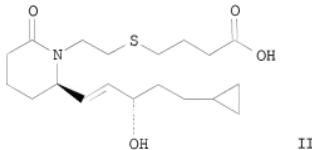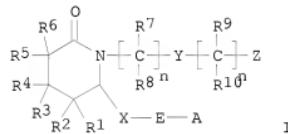
AB   2-Piperidone derivs. I (n = 0-4; A = alkyl, aryl, heteroaryl, arylalkyl,
     arylcycloalkyl, cycloalkylalkyl, aryloxyalkyl; E = CHOH, or C(O); Y = CH2,
     CH:CH, arylene, heteroarylene, O, S(O)p (p = 0-2), NRa (Ra = H, alkyl); Z
     = CH2OH, CHO, tetrazole-5-yl, COORb (Rb = H, alkyl); R1, R2, R3, R4, R5,
     R6, R7, R8, R9, R10 = H, alkyl) and pharmaceutically acceptable salts,
     solvates, prodrugs, single isomers or racemic or non-racemic mixture of
     isomers thereof were prepared as selective prostaglandin EP4 agonists for
     the treatment of associated diseases. Thus, 6R-(1-ethoxy-
     ethoxymethyl)piperidin-2-one was treated with NaH,a nd 2-bromoethanol
     triisopropylsilyl ether, followed by pyridinium p-toluene sulfonic acid to
     give the alc. The alc. was oxidized to the aldehyde using Swern
     conditions, and treatment of the aldehyde with (4-cyclopropyl-2-
     oxobutyl)phosphonic acid di-Me ester gave the alkene. Reduction of the ketone

using (R)-2-methyl-CBS-oxazaborolidine followed by deprotection of the silylether gave the primary alc. Treatment of the alc. with γ-thiobutyrolactone gave the Me ester which was treated with NaOH to give the desired II. The invention also provides methods for preparing, compns. comprising, and methods for using compds. of formula I.

```
ACCESSION NUMBER:         2004:589253  CAPLUS
DOCUMENT NUMBER:          141:123513
TITLE:                    2-piperidone derivatives as prostaglandin agonists
INVENTOR(S):              Elworthy, Todd Richard
PATENT ASSIGNEE(S):       Roche Palo Alto LLC, USA
SOURCE:                   U.S. Pat. Appl. Publ., 26 pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:


    PATENT NO.          KIND    DATE        APPLICATION NO.       DATE
    ---------------     ----    --------    ---------------       --------
    US 20040142969      A1      20040722    US 2004-754117        20040108
    US 7271183          B2      20070918
    AU 2004203905       A1      20040729    AU 2004-203905        20040102
    CA 2511255          A1      20040729    CA 2004-2511255       20040102
    WO 2004063158       A1      20040729    WO 2004-EP8           20040102
        W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ
    EP 1585729          A1      20051019    EP 2004-700041        20040102
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    BR 2004006717       A       20051220    BR 2004-6717          20040102
    CN 1735597          A       20060215    CN 2004-80002071      20040102
    JP 2006515015       T       20060518    JP 2005-518636        20040102
    RU 2311409          C2      20071127    RU 2005-125284        20040102
    IN 2005CN01522      A       20080404    IN 2005-CN1522        20050705
    MX 2005PA07341      A       20050930    MX 2005-PA7341        20050706
    KR 752891           B1      20070828    KR 2005-7012704       20050708
    US 20080058375      A1      20080306    US 2007-895386        20070824
PRIORITY APPLN. INFO.:                      US 2003-439152P    P  20030110
                                            WO 2004-EP8        W  20040102
                                            US 2004-754117     A1 20040108
OTHER SOURCE(S):          MARPAT 141:123513
IT   724705-74-2P
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
    (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
    (Uses)
        (preparation of 2-piperidone derivs. as selective prostaglandin EP4 agonists
        for the treatment of associated diseases)
RN   724705-74-2  CAPLUS
CN   Butanoic acid, 4-[[2-[(2R)-2-[(1E,3S)-3-hydroxy-4-[3-
     (methoxymethyl)phenyl]-1-buten-1-yl]-6-oxo-1-piperidinyl]ethyl]thio]-  (CA
     INDEX NAME)


Absolute stereochemistry.
Double bond geometry as shown.
```

The structure shows a 2-piperidinone ring (lactam) labeled R at the ring junction carbon, connected via an E-configured double bond to a CH(OH) center (labeled S), linked through S to a CH$_2$ attached to a meta-substituted benzene bearing a CH$_2$OMe group. The lactam nitrogen bears a CH$_2$CH$_2$-S-(CH$_2$)$_3$-CO$_2$H chain.
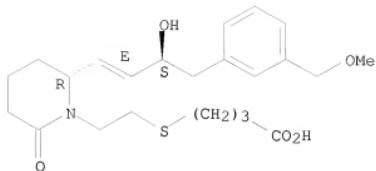
REFERENCE COUNT: 28   THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y
STN INTERNATIONAL LOGOFF AT 11:04:22 ON 15 JUL 2008